

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

PENDING CLAIMS

Claims 1-3, 5-9 and 11-13 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 1-3, 5-9 and 11-19 will be pending for further consideration and examination in the application.

REJECTION UNDER 35 USC '103

The 35 USC '103 rejection of claims 1-3, 5-9 and 11-13 as being unpatentable over Ludwig et al. (U.S. Patent 6,487,218) in view of Mandayam (U.S. Patent 7,308,260) is respectfully traversed. However, such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by

reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following remarks.

Important differences between the previously-applied references and Applicant's present invention are explained as follows. More particularly, as mentioned in paragraphs [0002] to [0017] of this application's **US 2008/0095084 A1** publication, **Applicant's present invention** relates to **using a point-to-point protocol (PPP) prescribed in accordance with the RFC1161 standard.**

The above-mentioned PPP is used for data communication between a terminal and a data communication device, for example. The PPP includes LCP (Link Control Protocol) and NCP (Network Control Protocol) components.

As a background problem, handover in a wireless communication system disadvantageously causes PPP disconnection/reconnection. Such is a problem unique to wireless communication.

In order to solve such problem, Applicant's present invention **stores the authentication policy and the protocol type beforehand, for example, in the station and the access server.** Added dependent claims 14-19 explicitly detail examples of where such information is storable. The authentication policy and the protocol type are then subsequently available and are used for PPP connection. This makes it possible that the respective phase sections for PPP connection can access the stored items and then work in parallel, and such ability reduces the PPP connection time (see paragraph [0024]).

Applicant's present invention uses (i.e., remains in accordance with) RFC1661 standard packets of an LCP packet, an authentication packet and an NCP

packet, which means that **Applicant's present invention advantageously abides by the RFC1661 standard.**

Turning to the references, **Ludwig** (US 6487218B) relates to a method and device for configuring a link such as the internet, or a link for accessing a packet switching network.

Applicant respectfully submits that the parts of Ludwig cited in the Office Action, are the same as the contents of RFC1661, i.e., such parts add nothing new to RFC1661. For example, see FIG. 2 and column 6, lines 65 to 65 of Ludwig. Such parts are only for explanation of the encapsulation process prescribed by RFC1661.

Ludwig shows an improved method for controlling a device that is designed to establish a link to a packet exchange network (column 5, lines 38 to 42).

Ludwig shows to control a device to exchange packets according to a second predetermined protocol (PPP) which encapsulates a first protocol and includes a third protocol (LCP) for establishing the link. In the second protocol, a packet includes a protocol field including a protocol identifier and an information field including data relating to the protocol identified by the protocol identifier. The process which establishes the link exchanges the packets having the third protocol identifier and discards other packets (claim 1).

In Ludwig, when two peers connected to a link operate according to the Ludwig method, it is possible to avoid the sequential steps of link configuration employed by the second protocol (PPP) by sending all the necessary information (LCP, IPCP, etc.) in parallel in both directions. Such may improve the link configuration speed (see, for example, column 6, lines 24 to 30).

Ludwig requires that the packet includes the specific protocol identifier in the protocol field to change the process depending on the protocol identifier as described in column 5, line 45 to column 6, line 23. As a result of such packet construction, a PPP packet of Ludwig is a unique PPP packet having the specific protocol identifier. More particularly, **such is not a standard PPP packet**, and therefore may experience difficulty in being widely accepted. The IETF (Internet Engineering Task Force) specifically prescribes the protocol identifiers. If IETF determines to use the specific value used for the specific protocol identifier for other purpose in the future, Ludwig will cease to work, i.e., may conflict with the standard.

In contrast, **Applicant's present invention advantageously abides by the standard of RFC1661**, and **the PPP packets of Applicant's present invention have the standard protocol identifier**. Not only PPP packets, but also LCP packets, authentication packets, and NCP packets are also the standard packets in Applicant's present invention. Accordingly, Applicant's present invention is advantageously biased toward widespread adoption.

Continuing with the previously-applied art, **Mandayam** (US 7308260B2) supports authentication of wireless communications devices accessing the services of packet switched data networks (column 1, lines 8 to 12).

Mandayam relates to the wireless communication device authentication only. In the Office Action, the examiner indicated that Mandayam teaches executing a plurality of control processing on column 9, lines 59 to 63. However, Applicant respectfully submits that such Mandayam part only shows an example of the hardware structure and describes that a processor may be implemented as a

combination of computing devices, etc. More particularly, such Mandayam part does not mention about parallel processing for PPP connection processes.

To summarize, Applicant respectfully submits that the previously-applied references do not include a PPP processing section which uses the previously-stored authentication policy and protocol type, the phase information combination section, or the encapsulation section in the independent claims of Applicant's present invention. No other previously-applied reference cures the major deficiencies mentioned above with respect to the above-discussed reference(s). Given that the previously-applied references are mutually deficient in a number of regards, it is respectfully submitted that the previously-applied and/or known references (whether taken individually, or in combination) would not have disclosed or suggested Applicant's claimed invention.

To conclude, **Applicant's present invention reduces the PPP connection time without deviating from the RFC1661 standard.**

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the '103 rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.46461X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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